

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (Canceled).

2 (Withdrawn/Currently Amended). A method in accordance with claim 4743, wherein the individual in need thereof is being treated post-operatively after tumor removal from or surgery on the CNS to protect CNS cells from glutamate toxicity.

3-7 (Canceled).

8 (Currently Amended). A method in accordance with claim 4746, wherein said Copolymer 1 or a Copolymer 1-related peptide or polypeptide is Copolymer 1.

9 (Withdrawn/Currently Amended). A method in accordance with claim 4146, wherein said Copolymer 1 or a Copolymer 1-related peptide or polypeptide is a Copolymer 1-related peptide or polypeptide.

10 (Canceled).

11 (Currently Amended). A method in accordance with claim 4746, wherein said Copolymer 1 or Copolymer 1-related peptide or polypeptide is a random copolymer that cross-reacts functionally with myelin basic protein (MBP) and is capable of

competing with MBP on the MHC class II molecule in antigen presentation.

12 (Previously Presented). A method in accordance with claim 11, wherein said random copolymer comprises one amino acid residue selected from each of at least three of the following groups:

- (a) lysine and arginine;
- (b) glutamic acid and aspartic acid;
- (c) alanine and glycine; and
- (d) tyrosine and tryptophan.

13 (Previously Presented). A method in accordance with claim 12, wherein said random copolymer consists of four different amino acid residues, each from a different one of the groups (a) to (d).

14 (Previously Presented). A method in accordance with claim 13, wherein said four different amino acid residues are alanine, glutamic acid, lysine and tyrosine.

15 (Withdrawn). A method in accordance with claim 14, wherein said random copolymer consists of three different amino acid residues, each from a different one of three groups (a) to (d).

16 (Withdrawn). A method in accordance with claim 15, wherein said three different amino acid residues are tyrosine, alanine, and lysine.

17 (Withdrawn). A method in accordance with claim 15, wherein said three different amino acid residues are tyrosine, glutamic acid and lysine.

18 (Withdrawn). A method in accordance with claim 15, wherein said three different amino acid residues are lysine, glutamic acid, and alanine.

19 (Withdrawn). A method in accordance with claim 15, wherein said three different amino acid residues are tyrosine, glutamic acid, and alanine.

20 (Canceled).

21 (Withdrawn/Currently Amended). A method in accordance with claim 4744, ~~in which said~~ wherein said individual in need is one suffering from an injury ~~or disease~~ comprises selected from the group consisting of spinal cord injury, blunt trauma, penetrating trauma, hemorrhagic stroke, ~~or~~ and ischemic stroke.

22 (Currently Amended). A method in accordance with claim 4844, ~~in which said injury or~~ wherein said disease is selected from the group consisting of Diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, status epilepticus, non-arteritic optic neuropathy, ~~or~~ and vitamin deficiency.

23 (Withdrawn/Currently Amended) (Withdrawn). A method in accordance with claim 4744, ~~in which said injury or disease is~~ wherein said individual in need is one suffering from epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, or opiate tolerance and dependence.

24 (Currently Amended). A method in accordance with claim 4744, ~~in which said~~ wherein said individual in need is suffering from an injury or disease ~~is~~ associated with abnormally elevated intraocular pressure.

25 (Currently Amended). A method in accordance with claim 4744, ~~in which said~~ wherein said individual in need is one suffering from an injury or disease that is other than an autoimmune disease.

26 (Canceled).

27 (Withdrawn/Currently Amended). A method in accordance with claim 5026, wherein said activated T cells are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

28 (Withdrawn). A method in accordance with claim 27, wherein said T cells are autologous T cells which have been stored or are derived from autologous CNS cells.

29 (Withdrawn). A method in accordance with claim 27, wherein said T cells are semi-allogeneic T cells.

30 (Canceled).

31 (Currently Amended). A method in accordance with claim ~~4930~~, wherein said Copolymer 1 or a Copolymer 1-related peptide or polypeptide is Copolymer 1.

32 (Withdrawn/Currently Amended). A method in accordance with claim ~~4930~~, wherein said Copolymer 1 or a Copolymer 1-related peptide or polypeptide is a Copolymer 1-related peptide or polypeptide.

33 (Currently Amended). A method in accordance with claim ~~4930~~, in which said Copolymer 1 or a Copolymer 1-related peptide or polypeptide is administered in a manner which promotes active immunization of the individual so as to build up a critical T cell response.

34 (Currently Amended). A method in accordance with claim ~~4920~~, wherein said Copolymer 1 Copolymer 1-related peptide or polypeptide is a random copolymer that cross-reacts functionally with myelin basic protein (MBP) and is capable of competing with MBP on the MHC class II molecule in antigen presentation.

35 (Previously Presented). A method in accordance with claim 34, wherein said random copolymer comprises one

amino acid residue selected from each of at least three of the following groups:

- (a) lysine and arginine;
- (b) glutamic acid and aspartic acid;
- (c) alanine and glycine; and
- (d) tyrosine and tryptophan.

36 (Previously Presented). A method in accordance with claim 35, wherein said random copolymer consists of four different amino acid residues, each from a different one of the groups (a) to (d).

37 (Previously Presented). A method in accordance with claim 36, wherein said four different amino acid residues are alanine, glutamic acid, lysine and tyrosine.

38 (Withdrawn). A method in accordance with claim 37, wherein said random copolymer consists of three different amino acid residues, each from a different one of three groups (a) to (d).

39 (Withdrawn). A method in accordance with claim 38, wherein said three different amino acid residues are tyrosine, alanine, and lysine.

40 (Withdrawn). A method in accordance with claim 38, wherein said three different amino acid residues are tyrosine, glutamic acid and lysine.

41 (Withdrawn). A method in accordance with claim 38, wherein said three different amino acid residues are lysine, glutamic acid, and alanine.

42 (Withdrawn). A method in accordance with claim 38, wherein said three different amino acid residues are tyrosine, glutamic acid, and alanine.

43-46 (Canceled).

47 (New). A method for reducing neuronal degeneration caused by the neurodegenerative effects of disease, or for reducing secondary neuronal degeneration that follows the primary neuronal damage of an injury, in the central or peripheral nervous system of an individual in need thereof, which neuronal degeneration or secondary neuronal degeneration is caused or exacerbated by glutamate toxicity comprising:

causing T cells activated by Copolymer 1 or a Copolymer 1-related peptide or polypeptide to accumulate at the site of neuronal degeneration in the individual in need, thereby reducing neuronal degeneration at that site.

48 (New). A method in accordance with claim 47, wherein the individual in need is one suffering from a disease that has neurodegenerative effects.

49 (New). A method in accordance with claim 47, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of Copolymer 1 or a Copolymer 1-related peptide or polypeptide in such a manner as to cause a T cell response thereto, such that T cells become activated by the Copolymer 1 or Copolymer 1-related peptide or polypeptide.

50 (New). A method in accordance with claim 47, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of activated T cells that have been activated by Copolymer 1 or a Copolymer 1-related peptide or polypeptide.

51. (New). A method for ameliorating the effects of an injury or disease that involves neuronal degeneration of the central or peripheral nervous system of an individual in need thereof, which neuronal degeneration is caused or exacerbated by glutamate toxicity, comprising:

causing T cells activated by Copolymer 1 or a Copolymer 1-related peptide or polypeptide to accumulate at the site of neuronal degeneration in the individual in need, thereby reducing neuronal degeneration at that site.

52 (New). A method in accordance with claim 51, wherein the individual in need thereof is being treated post-



operatively after tumor removal from or surgery on the CNS, whereby the secondary neuronal degeneration caused by glutamate toxicity, following the primary neuronal damage of the surgery, is reduced.

53. (New). A method in accordance with claim 51, wherein said individual in need is one whose neuronal degeneration or secondary neuronal degeneration is caused or exacerbated by glutamate toxicity.

54. (New). A method in accordance with claim 51, wherein the individual in need is one suffering from an injury that has caused primary neuronal damage.

55. (New) A method in accordance with claim 54, wherein said injury is selected from the group consisting of spinal cord injury, blunt trauma, penetrating trauma, hemorrhagic stroke, or ischemic stroke.

56 (New) A method in accordance with claim 51, wherein the individual in need is one suffering from a disease that has neurodegenerative effects.

57 (New) A method in accordance with claim 56, wherein said disease is selected from the group consisting of diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, status

epilepticus, non-arteritic optic neuropathy, and vitamin deficiency.

58 (New). A method in accordance with claim 51, wherein the individual in need is one suffering from epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, or opiate tolerance and dependence.

59 (New). A method in accordance with claim 51, wherein said individual in need is one suffering from an injury or disease associated with abnormally elevated intraocular pressure.

60 (New). A method in accordance with claim 51, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of Copolymer 1 or a Copolymer 1-related peptide or polypeptide in such a manner as to cause a T cell response thereto, such that T cells become activated by the Copolymer 1 or Copolymer 1-related peptide or polypeptide.

61 (New). A method in accordance with claim 60, in which said Copolymer 1 or Copolymer 1-related peptide or polypeptide is administered in a manner which promotes active immunization of the individual so as to build up a critical T cell response.

62 (New). A method in accordance with claim 51, wherein said activated T cells are caused to accumulate at the

site of neuronal degeneration by administering an effective amount of activated T cells that have been activated by Copolymer 1 or a Copolymer 1-related peptide or polypeptide.

63 (New). A method in accordance with claim 62, wherein said activated T cells specific to Copolymer 1 or Copolymer 1-related peptide or polypeptide are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

64 (New). A method in accordance with claim 63, wherein said T cells are autologous T cells which have been stored or are derived from autologous CNS cells.

65 (New). A method in accordance with claim 63, wherein said T cells are semi-allogeneic T cells.